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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,872	10/17/2003	Nicholas G.L. Merz	D0000-1005d1	2246
24208	7590	08/23/2006	EXAMINER	
ROBERT PLOTKIN, PC 91 MAIN STREET, SUITE 204 CONCORD, MA 01742-2527			LEON, EDWIN A	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/688,872

Applicant(s)

MERZ, NICHOLAS G.L.

Examiner

Edwin A. León

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7-10 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-8, 10 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's Amendment filed July 10, 2006, in which Claims 1, 7 and 10 have been amended, has been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso-Chin et al. (U.S. Patent No. 6,210,216) in view of Okamoto (U.S. Patent No. 6,752,662). With regard to Claims 1 and 3, Tso-Chin et al. discloses an electronic device (10) comprising: a housing (14); a first connector (right 46, 22) comprising: a first cavity (inside 22, 46) defined by at least one first interior portion (right 22, 46) of the housing, the at least one first interior portion comprising a first outer shell (22) integrally formed in the housing, the first outer shell having a first cross-sectional profile of a first plug to which the first connector may mate; and a first electrical contact (tongue inside

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22) integrally formed with and extending from a component of the electronic device and protruding into the first cavity; a second connector (left 46, 22) comprising: a second cavity (inside 22) defined by at least one second interior portion (left 22, 46) of the housing, the at least one second interior portion comprising a second outer shell (left 22) integrally formed in the housing, the second outer shell having a second cross-sectional profile of a second plug to which the second connector may mate; and a second electrical contact (tongue inside 22) integrally formed with and extending from a component of the electronic device and protruding into the second cavity; wherein the housing includes the first connector and the second connector. See Figs. 1-3.

Tso-Chin et al. doesn't show the component comprising a printed circuit board, the first and second electrical contact being integrally formed in one piece with the circuit board.

Okamoto discloses a similar connector (20) having component (10) comprising a printed circuit board (10) and having an electrical contact (11) integrally formed in one piece with the board (10). See Figs. 1-3.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Tso-Chin et al. by having the component comprising a printed circuit board and having an electrical contact integrally formed in one piece with the board as taught in Okamoto in order to reduce the thickness of the connector making it less expensive when manufactured.

4. Claims 4-5, 7-8, 10-11 and 13-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Tso-Chin et al. (U.S. Patent No. 6,210,216) in view of Okamoto (U.S. Patent No. 6,752,662) and Tan et al. (U.S. Patent No. 6, 475,021). The combination of Tso-Chin et al. and Okamoto discloses the claimed invention as shown above except for the first connector complying with requirements of a first connector standard and wherein properties of the second connector complying requirements of second connector standard that differs from the first connector standard, the first connector standard comprises the Universal Serial Bus standard and wherein the second standard comprises the IEEE 1394 standard.

Tan et al. discloses a similar connector using connectors complying with the requirements of the Universal Serial Bus standard and the IEEE 1394 standard. See Figs. 1A-6, Column 2, Lines 41-51, and Column 7, Lines 25-40.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Tso-Chin et al. and Okamoto by making the connectors comply with the requirements of the Universal Serial Bus standard and the IEEE 1394 standard as taught in Tan et al. since it is well known in the art of electrical connectors that this would make the connector more versatile.

***Allowable Subject Matter***

5. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims for the reasons stated in the Office Action of July 12, 2004.

6. Claims 16-18 are allowed for the reasons stated in the Office Action of July 12, 2004.

### ***Response to Arguments***

7. Applicant's arguments filed July 10, 2006 have been fully considered but they are not persuasive. In response to Applicant's argument regarding Claims 1, 7 and 10 that the Tso-Chin et al. reference doesn't show the first cavity defined by at least one first interior portion of the housing, the at least one first interior portion comprising a first outer shell integrally formed in the housing and the second cavity defined by at least one second interior portion of the housing, the at least one second interior portion comprising a second outer shell integrally formed in the housing, Applicant's attention is directed to Fig. 2 in which Tso-Chin et al. clearly discloses the first cavity (inside 22, 46) defined by at least one first interior portion (right 22, 46) of the housing, the at least one first interior portion comprising a first outer shell (22) integrally formed in the housing and the second cavity (inside 22) defined by at least one second interior portion (left 22, 46) of the housing, the at least one second interior portion comprising a second outer shell (left 22) integrally formed in the housing. Applicant is reminded that portions 46 are inside the housing 14 and are integral with the housing. Also, shells 22 are integral with the housing and their front part can be considered to be an outer shell. Therefore, it is

the Examiner's opinion that the Tso-Chin et al. reference reads in Applicant's claims in their broadest interpretation.

### ***Conclusion***

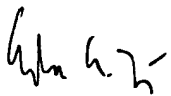
8. **THIS ACTION IS MADE FINAL** necessitated by amendment. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Edwin A. Leon  
AU 2833

EAL  
August 20, 2006

  
TRUCT. NGUYEN  
PRIMARY EXAMINEE